Installation Guide

hp StorageWorks Continuous Access User Interface V1.1A

Product Version: 1.1A

Fourth Edition (July 2004)

Part Number: T3031–96303

This guide contains the installation instructions for the Continuous Access user interface V1.1A software application.

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Continuous Access User Interface V1.1A Installation Guide
Fourth Edition (July 2004)
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About This Guide

This installation guide provides information to help you:

- Understand requirements prior to installing the Continuous Access user interface software application.
- Install the Continuous Access user interface.

Topics in this section include:

- Revision history, page 5
- About the Continuous Access user interface, page 6
- Intended audience, page 6
- Related documentation, page 7
- Conventions, page 7
- Getting help, page 9

Revision history

Table 1: Revision history

Edition/Date	Summary
Fourth (July 2004)	Added support for VCS V3.02.

About the Continuous Access user interface

The HP StorageWorks Continuous Access user interface runs on the HP OpenView Storage Management Appliance (SMA) as a service accessed from the HP OpenView Storage Management Appliance software version 2.1. The Continuous Access user interface manages operations such as:

- Creating and deleting copy sets, DR groups, managed sets, and storage system folders.
- Populating managed sets with DR groups, and configuring data replication attributes on these sets.
- Suspending or resuming disk I/O on storage systems, DR groups, and managed sets.
- Failing over managed sets, storage systems, and DR groups.
- Disabling and enabling failsafe mode.
- Viewing and deleting events generated by the SMA.
- Monitoring merging and logging activity on your storage systems.
- Backing up and restoring the Continuous Access user interface configuration.

Intended audience

This guide is intended for Enterprise Virtual Array (EVA) system administrators and technicians who are experienced with the following:

- Enterprise Virtual Array (EVA) storage systems
- Enterprise Virtual Array Virtual Controller Software (VCS) versions 3.0, 3.01, and 3.02.
- Command View EVA V3.1 or higher.
- Storage Management Appliance software V2.1

Related documentation

In addition to this document, HP provides the following related information:

- *HP StorageWorks Continuous Access User Interface V1.1A Release Notes*
- *HP StorageWorks Continuous Access EVA V1.1B Release Notes*
- *HP StorageWorks Continuous Access EVA V1.1 Getting Started Guide*
- *HP StorageWorks Continuous Access EVA V1.1B Operations Guide*
- *HP StorageWorks Continuous Access EVA V1.1B Design Reference Guide*
- *HP OpenView Storage Management Appliance Software: Using Multiple Storage Management Appliances in a SAN Application Notes V2.1*
- *HP OpenView Storage Management Appliance Software High Availability V2.1*

To obtain these documents, browse to the HP storage website at http://h18006.www1.hp.com/storage/software.html, and then navigate to the applicable product page.

You can download the Continuous Access User Interface V1.1 software (an SWP file) from the following website: http://h18006.www1.hp.com/products/storage/software/softwaredrivers/conaccesseva/index.html.

Conventions

Conventions consist of the following:

- Document conventions
- Text symbols

Document conventions

The document conventions included in Table 2 apply in most cases.

Table 2: Document conventions

Element	Convention
Cross-reference links	Figure 1
Key and field names, menu items, buttons, and dialog box titles	**Bold**
File names, application names, and text emphasis	*Italics*
User input, command and directory names, and system responses (output and messages)	`Monospace font` `COMMAND NAMES` are uppercase monospace font unless they are case sensitive
Variables	*`<monospace, italic font>`*
Website addresses	Blue, underlined sans serif font text: http://www.hp.com

Text symbols

The following symbols may be found in the text of this guide. They have the following meanings:

WARNING: Text set off in this manner indicates that failure to follow directions in the warning could result in bodily harm or death.

Caution: Text set off in this manner indicates that failure to follow directions could result in damage to equipment or data.

Note: Text set off in this manner presents commentary, sidelights, or interesting points of information.

Getting help

If you still have a question after reading this document, contact an HP authorized service provider or access our website: http://www.hp.com.

HP technical support

Telephone numbers for worldwide technical support are listed on the following HP website: http://www.hp.com/support/. From this website, select the country of origin.

Note: For continuous quality improvement, calls may be recorded or monitored.

Be sure to have the following information available before calling:

- Technical support registration number (if applicable)
- Product serial numbers
- Product model names and numbers
- Applicable error messages
- Operating system type and revision level
- Detailed, specific questions

HP storage website

The HP website has the latest information on this product, as well as the latest drivers. Access storage at http://www.hp.com/country/us/eng/prodserv/storage.html. From this website, select the appropriate product or solution.

HP authorized reseller

For the name of your nearest HP authorized reseller:

- In the United States, call 1-800-345-1518
- In Canada, call 1-800-263-5868
- Elsewhere, see the HP website for locations and telephone numbers: http://www.hp.com.

Prerequisites for Installation

This chapter contains information on installation prerequisites. Topics include:

- Hardware preparation, page 11
- Software preparation, page 11
- The Continuous Access user interface license, page 12

Hardware preparation

Before installing the Continuous Access user interface, refer to the *HP StorageWorks Continuous Access EVA Getting Started Guide* to view the EVA hardware setup and configuration steps. Storage system hardware is usually installed by HP authorized service providers. In addition, ensure that the latest firmware versions are applied to all hardware.

Software preparation

Before installing the Continuous Access user interface, make sure that you have installed Command View EVA V3.1 or higher on your Storage Management Appliance (SMA) that is running SMA software version 2.1. HP also recommends that you install all Microsoft hotfixes.

The Continuous Access user interface license

Each storage system that performs remote replication requires a replication capacity based license for Continuous Access EVA. Additional licenses may be required for other HP products such as HP StorageWorks Business Copy. Consult your HP sales representative.

The Continuous Access user interface is licensed through the Continuous Access EVA software license. The Continuous Access user interface cannot be installed unless you have a license for Continuous Access EVA.

Installing the Continuous Access User Interface

2

This chapter covers the following topics:

- About installing the Continuous Access user interface on multiple Storage Management Appliances, page 14
- Installing the Continuous Access user interface, page 15
  - Installing from a CD-ROM, page 15
  - Installing from an FTP server, page 17
  - Installing from a local disk, page 19
- Obtaining the JRE, page 22
- Starting the Continuous Access user interface, page 22
  - Scanning for EVA storage systems, page 23
  - Rescan of the SAN after VCS upgrade, page 24
  - Using help for the Continuous Access user interface, page 24

About installing the Continuous Access user interface on multiple Storage Management Appliances

Consider the following information about Storage Management Appliances (SMAs) before you install the Continuous Access user interface:

- All SMAs can be powered on at the same time.
- The user interface can be installed on as many SMAs as you have in your SAN.
- Although multiple SMAs can be active in the SAN, only one SMA can manage a storage system at any given time.
- After the user interface is installed on an SMA and you have configured Continuous Access, re-create your storage configuration on any "backup" SMAs by:
  - Installing the Continuous Access user interface on a second SMA, taking control of the storage systems, recreating the configuration on the second SMA (that is, creating the same managed sets and/or storage system folders), and then, after the second SMA has been configured, retaking control of the storage systems with the first SMA.
  - Or, by backing up the database from the configured SMA and then restoring the configuration database onto the new SMA.

Note: The Continuous Access user interface V1.1 cannot restore a database from the Continuous Access user interface V1.0.

A detailed description of how to configure a backup SMA (or active-active Storage Management Appliances) is found in "Configuring active-active Storage Management Appliances" on page 28.

Note: For information on configuring the passive appliance refer to the *HP OpenView Storage Management Appliance Software Using Multiple Storage Management Appliances in a SAN Application Notes*. Please note that the information on using Dynamic Host Configuration Protocol (DHCP) on the standby SMA does not apply to the Continuous Access user interface. A passive appliance must have the same name and IP address as the active appliance, or a different name and different IP address. In all cases where the Continuous Access user interface is installed on an SMA, that SMA must use a fixed IP address.

Installing the Continuous Access user interface

You can install the Continuous Access user interface in three ways:

- From a CD-ROM drive in the SMA
- From an FTP server
- From a file on a local disk in the SMA

When you install from a local disk or an FTP server, the installation program installs an SWP file. When you install from a CD-ROM drive, the installation program installs from a specially created image on the installation CD.

Note: To install the Continuous Access user interface, you must have administrator rights on the SMA.

Installing from a CD-ROM

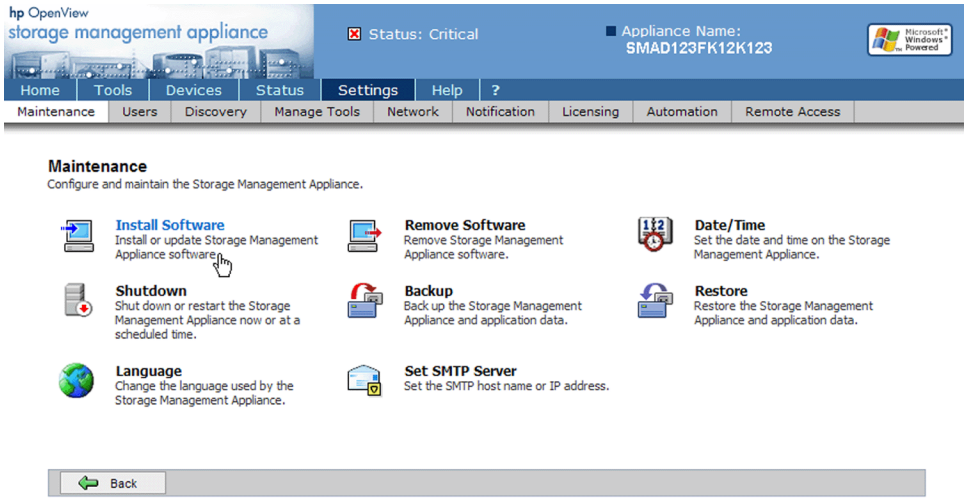
To choose the CD-ROM installation option, you must have a Continuous Access user interface installation CD.

However, if what you have is the SWP file on a CD, copy the SWP file into the `C:\Compaq\swpinstallkits` folder on the SMA, and then begin with step 7 of the "Installing from a local disk" procedure starting on page 19.

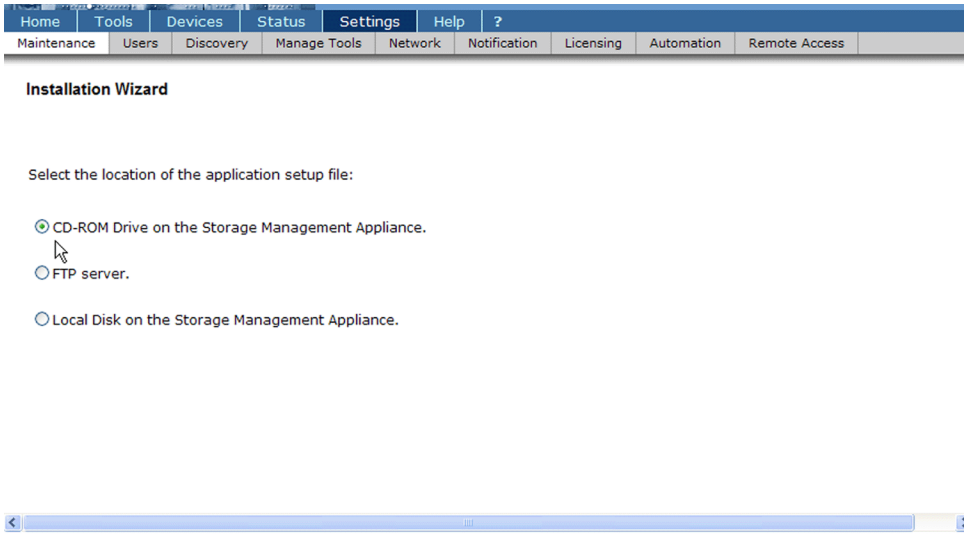
To install from the installation CD-ROM:

1. Launch a Web browser from a client and browse to the SMA.
2. Click **Settings**.
3. Click **Maintenance**.

   The Maintenance window opens.



4. Click **Install Software**.
5. Click **Next**.



6. Select **CD-ROM Drive on the Storage Management Appliance**.
7. Click **Next**.

   The installation program instructs you to insert the CD-ROM into the SMA.
8. Insert the installation CD as instructed into the CD-ROM drive of the SMA.

9. Click **Next**.

   The installation program indicates that the Continuous Access user interface is available for installation. A message warns you that the SMA will restart after the install is completed.

10. Confirm that the Continuous Access user interface is displayed in the box labeled "Select from the list," and then click **Next**.

    A message indicates that the installation is in progress. When the installation concludes, the SMA reboots, breaking your browser's connection with the SMA.

11. Close your browser.

After the SMA reboots, the Continuous Access user interface is available for your use.

Installing from an FTP server

Note: HP does not recommend installing the Continuous Access user interface directly from the HP FTP site. Instead, download the kit from the HP FTP site to an FTP server located on the same Intranet as the SMA.

To install from an FTP server:

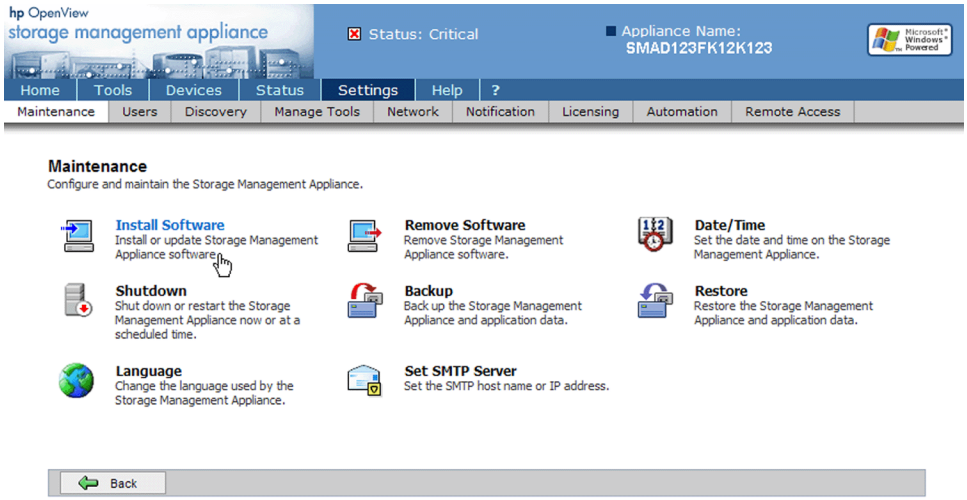
1. Launch a Web browser from a client, and then browse to the SMA.

   The Storage Management Appliance Home page opens.

2. Click **Settings**.

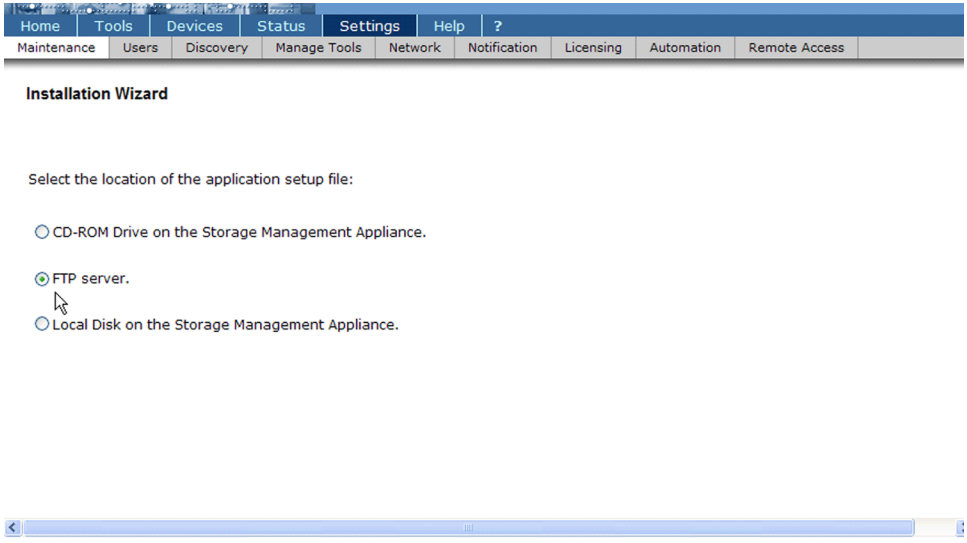
3. Click **Maintenance**.

   The Maintenance window opens.



4. Click **Install Software**.
5. Click **Next**.

   The Installation Wizard opens.



6. Select **FTP Server**.
7. Click **Next**.
8. Type the FTP information:

a. FTP server name.

b. The fully qualified file name. The file name should end in an SWP extension.

c. The user name you want to use to log in to the FTP server.

d. The password for the user name.

9. Click **Next**.

   A message indicates the progress of the download. When the installation program has unpacked the file, it displays the name of the program that was contained in the SWP file.

10. Confirm that the Continuous Access user interface is displayed in the **Select from the list** box, and then click **Next**.

    A message indicates that the installation is in progress. When the installation concludes, the SMA reboots, breaking your browser's connection with the SMA.

11. Close your browser.

After the SMA reboots, the Continuous Access user interface is available for your use.

Installing from a local disk

You can download the Continuous Access User Interface V1.1 software (an SWP file) from the following website: http://h18006.www1.hp.com/products/storage/software/softwaredrivers/conaccesseva/index.html.

To install a downloadable version of the user interface software from a local disk to the SMA:

1. Place the SWP file on a network drive that is accessible from the SMA.
2. Open a Microsoft® Terminal Services session to connect and log in to the SMA.

Note: If Terminal Services is not available, connect a monitor, mouse, and keyboard to the SMA.

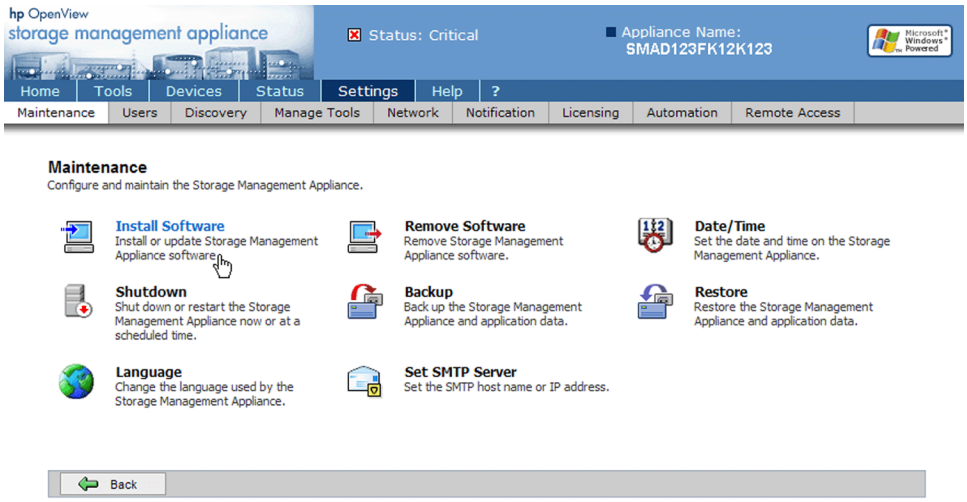
---

3. From the Storage Management Appliance desktop, connect to the network drive that contains the SWP file.

4. Copy the file from the share drive into the `C:\Compaq\swpinstallkits` folder on the SMA.
5. Disconnect from the accessed share drive.
6. Log off Terminal Services.
7. Launch a Web browser from a client, and then browse to the SMA.

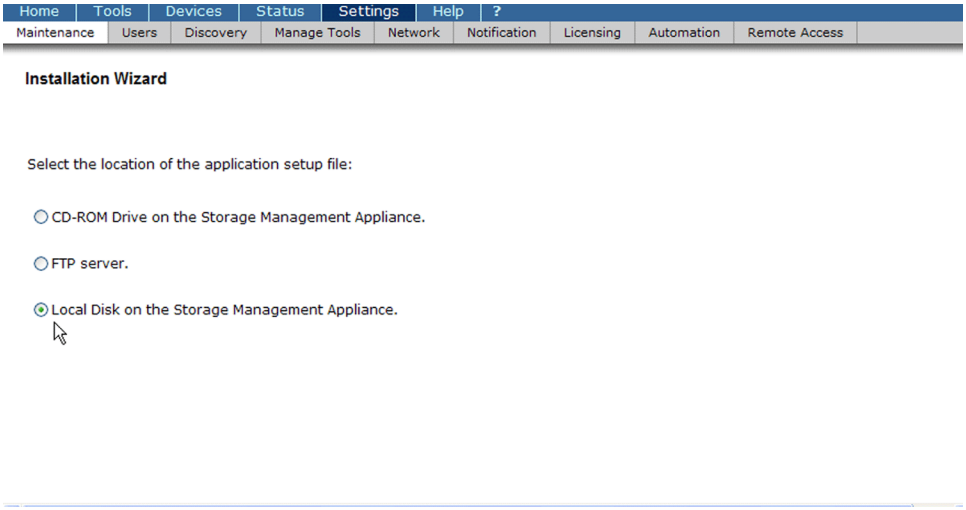
   The Storage Management Appliance Home page opens.
8. Click **Settings**.
9. Click **Maintenance**.

   The Maintenance window opens.



10. Click **Install Software**.
11. Click **Next**.

    The Installation Wizard opens.



12. Select **Local Disk**.
13. Click **Next**.

    A list displays the SWP files that are available for installation.
14. Select the file *StorageworksCA_Release-x_x.swp*, where *x_x* represents the version number of the release (for example, the Continuous Access user interface V1.1 would be *StorageworksCA_Release-1_1.swp)*.
15. Click **Next**.

    A message indicates that you have selected Continuous Access and warns you that the Storage Management Appliance will restart after the install is complete.
16. Click **Next**.

    A message indicates that the installation is in progress. When the installation concludes, the SMA reboots, breaking your browser's connection with the SMA.
17. Close your browser.

After the SMA reboots, the Continuous Access user interface is available for your use.

Obtaining the JRE

The Continuous Access user interface uses version 1.4.1_03 of the Java Runtime Environment (JRE). If not previously installed, the Continuous Access user interface attempts to obtain the JRE from the Sun website when it launches for the first time. If the website is inaccessible, you may see a blank screen or an error message. If this occurs, obtain this version of the JRE and install it manually.

If you choose to manually install the JRE, obtain it from the following website:

http://java.sun.com/products/archive/index.html

The JRE is downloaded as an executable file. Run the file to install the JRE.

Starting the Continuous Access user interface

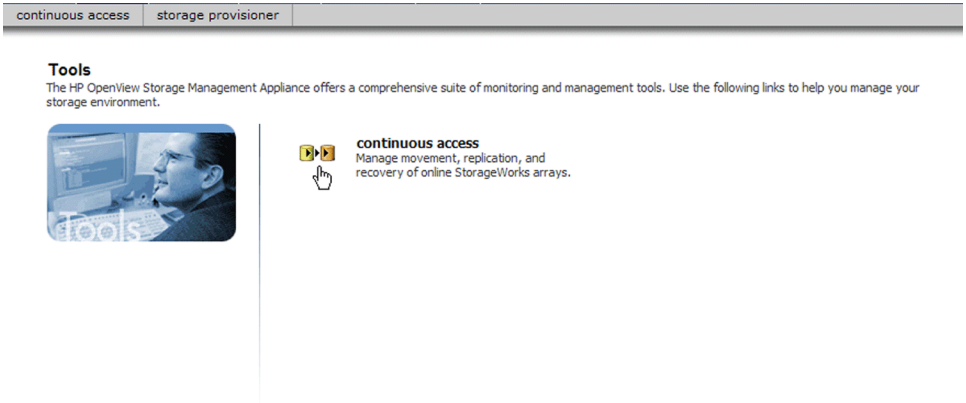
To start the Continuous Access user interface:

1. Launch a Web browser from a client, and then browse to the SMA.

   The Storage Management Appliance Home page opens.

2. Click **Tools**.

   The Tools window opens.



3. Click **Continuous Access**.

The Continuous Access user interface opens.

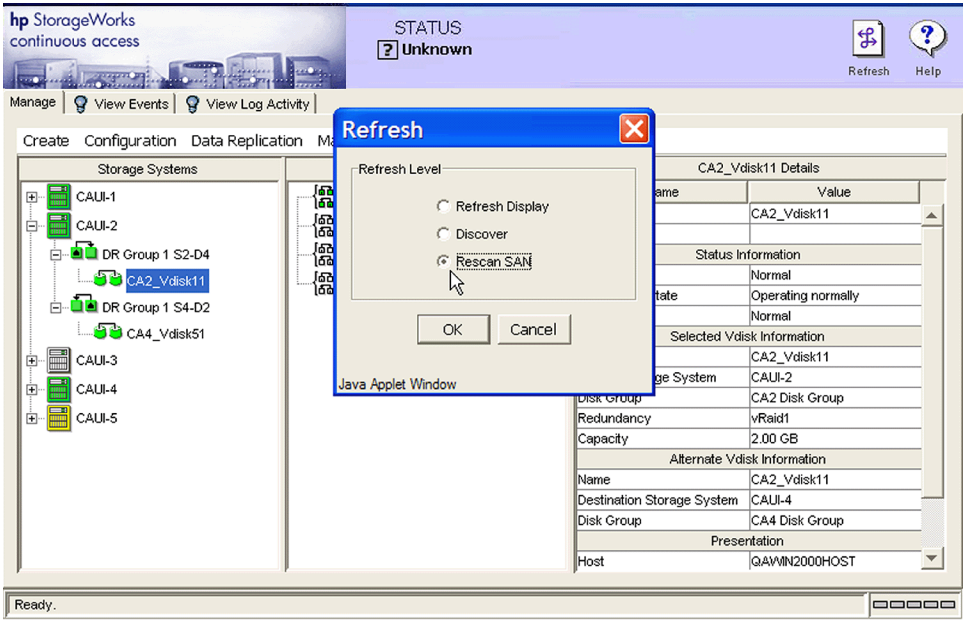
Scanning for EVA storage systems

The first time you open the Continuous Access user interface on an SMA, the Storage Systems pane is empty. Perform a rescan SAN operation to populate the Storage Systems pane with the EVA storage.

To perform a rescan SAN operation:

1. In the session pane, click the **Refresh** button.

   The Refresh dialog box opens.



2. Select **Rescan SAN**, and then click **OK**.

   A rescan SAN operation can take 30 minutes or longer depending on the separation distance between the local SMA and any remote arrays, and the number of objects contained within those arrays. (Refer to the "EVA Management Versus Distance" section of the *HP StorageWorks Continuous Access EVA Design Reference Guide V1.1B* for more information).

   After scanning, the Continuous Access user interface displays in the Storage Systems pane the discovered storage systems.

Note: Perform a rescan SAN operation for each SMA where the Continuous Access user interface does not display any icons in the Storage Systems pane.

Rescan of the SAN after VCS upgrade

The Continuous Access user interface V1.1A can manage storage systems running VCS versions 3.0, 3.01, and 3.02. If you were using the Continuous Access user interface to manage a storage system running VCS V3.0 and then upgrade VCS on that storage system, you will need to perform a rescan SAN operation so that the Continuous Access User Interface can read the new VCS version and enable the additional VCS functionality it provides.

Using help for the Continuous Access user interface

After you launch the Continuous Access user interface, refer to the online help for detailed information about using the program. To start online help, click the question mark icon at the top right of the Continuous Access user interface window.

Post-Installation Changes

3

This chapter covers the following topics:

- About active-active Storage Management Appliances, page 26
  - Configuring active-active Storage Management Appliances, page 28
  - Managing control of EVA storage using multiple SMAs, page 31.
- Enabling the Continuous Access user interface to receive events, page 32
  - About the maximum number of events, page 36
  - Setting the maximum number of events, page 36
- Changing the log refresh interval, page 37
- Enabling backup capabilities for the Continuous Access user interface, page 38
- Modifying the *java.policy* file, page 38

About active-active Storage Management Appliances

If the primary Storage Management Appliance (SMA) goes offline, a secondary SMA can take control of the storage systems in the SAN. However, if you have not “preloaded” the Continuous Access user interface database on the secondary SMA, any managed sets and storage system folders you created and configured on the primary SMA will not be available. The secondary SMA will still be able to discover storage systems, but without the preloaded Continuous Access user interface database, there will be no other organization to the user interface display.

The following example shows how to configure active-active SMAs so that they can function as backup SMAs for each other.

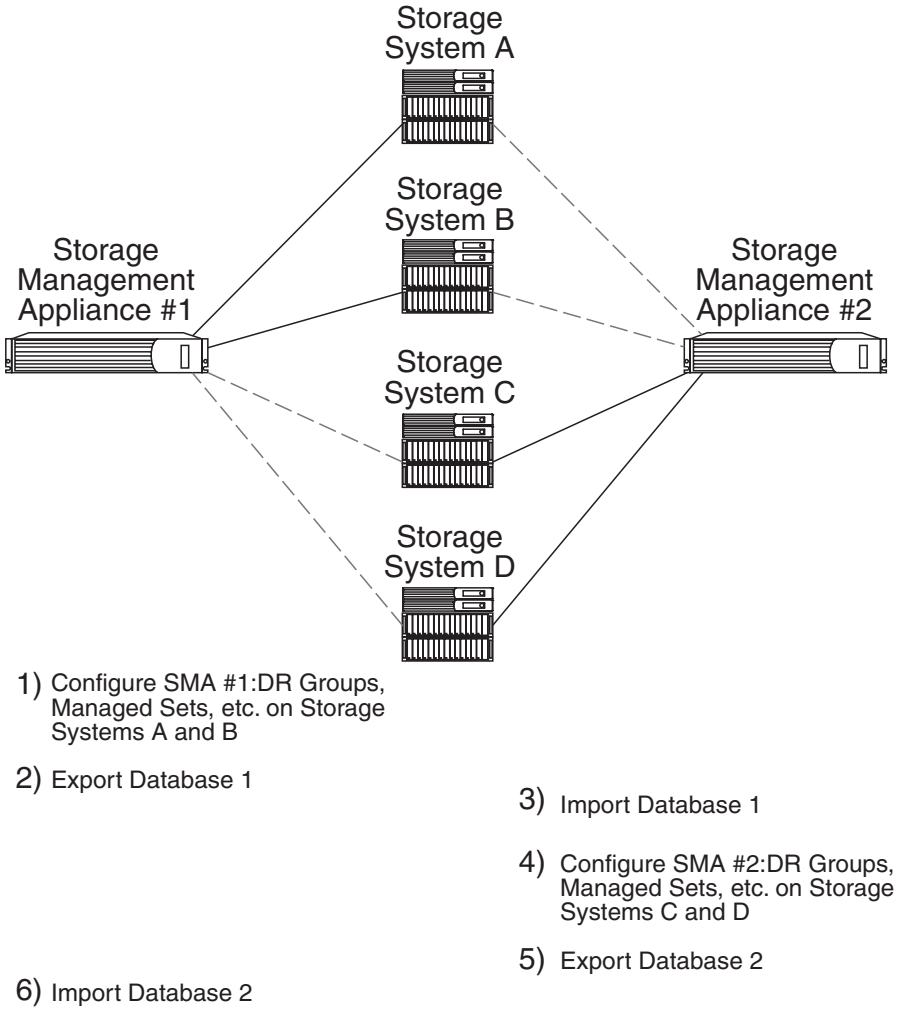


Figure 1: Example of active-active SMA configuration

To configure active-active SMAs as back-ups for each other:

1. Configure the Continuous Access user interface on storage systems A and B from SMA 1.
2. Back up the user interface database.

3. On SMA 2, restore the database (backed up in step 2).
4. Configure the Continuous Access user interface on storage systems C and D from SMA 2.
5. Back up the user interface database.
6. On SMA 1, restore the database (backed up in step 5).

In this configuration, either SMA is configured to take over management of storage systems from the other.

Configuring active-active Storage Management Appliances

To configure active-active SMAs as backups for each other:

Note: The following procedure assumes that the first SMA starts with management control of storage systems A and B and that the second SMA starts with management control of storage systems C and D.

---

1. Using the Continuous Access user interface installed on the first SMA, configure storage systems A and B as desired.
2. Select **Manage > Maintenance > Backup Database**.

   The Select Location window opens. (If you do not have permissions set correctly in your *java.policy* file, set them following the procedure "Modifying the java.policy file"on page 38.)

Note: The Continuous Access user interface does not recognize any network drives mapped while the Continuous Access session was open. If you cannot see a network drive that you mapped, exit the Continuous Access user interface, and then restart it.

---

3. Identify the subdirectory to which you want to save the database, and click **Save**.

   If the subdirectory does not exist, click the **Create Folder** icon to create it. After selecting the backup subdirectory, a confirmation window opens.
4. Click **Yes**.

The Continuous Access user interface backs up its database in the subdirectory specified. A window opens informing you the backup succeeded.

5. Click **OK**.
6. From a second SMA, launch Command View EVA.

   Command View EVA displays the storage systems in the SAN. The icons for the storage systems (A and B) that are being managed by the first SMA are gray.
7. Click a storage system (A or B), and then click **OK**.

   A confirmation dialog box opens.
8. Click **OK**.

   The second SMA takes control of the storage system, and Command View EVA opens the Initialized Storage System Properties window. The storage system icon changes color (generally to green, assuming there are no errors or warnings on the storage system).
9. Take control of the other storage system.
10. After the second SMA has control of both storage systems, launch the Continuous Access user interface installed on the second SMA.
11. Select **Manage > Maintenance > Restore Database**.

    The Select Location window opens.

Note: The Continuous Access user interface does not recognize any network drives mapped while the Continuous Access session was open. If you cannot see a network drive that you mapped, exit the Continuous Access user interface, and then restart it.

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12. Identify the subdirectory that contains the database you want and click **Restore**.

    A confirmation dialog box opens.
13. Click **Yes**.

    The Continuous Access user interface restores the database from the subdirectory you specified. A window opens informing you the restore was successful.
14. Click **OK**.

15. Select **Refresh > Rescan SAN**.

    After the rescan completes, the Continuous Access user interface database on the second SMA has the identical management configuration for storage systems A and B as the first SMA.

16. Using the Continuous Access user interface installed on the second SMA, configure storage systems C and D as desired.
17. Select **Manage > Maintenance > Backup Database**.

    The Select Location window opens.

18. Identify the subdirectory to which you want to save the database, and then click **Save**.

    A confirmation dialog box opens.

19. Click **Yes**.

    The Continuous Access user interface backs up its database in the subdirectory specified. A message informs you the backup succeeded.

20. Click **OK**.
21. From the first SMA, launch Command View EVA.

    Command View EVA displays the storage systems in the SAN. The icons for the storage systems that are being managed by the second SMA (A, B, C, and D) are gray.

22. Click a storage system (A or B), and then click **OK**.

    A confirmation dialog box opens.

23. Click **OK**.

    The first SMA takes control of the storage system, and Command View EVA opens the Initialized Storage System Properties window. The storage system icon changes color.

24. Take control of the other storage system.
25. After the first SMA has control of both storage systems, launch the Continuous Access user interface on the first SMA.
26. Select **Refresh > Rescan SAN**.

After the rescan completes, the Continuous Access user interface database on the first SMA has the same management configuration for storage systems A and B as it had before. In addition, it is configured to manage storage systems C and D if necessary.

Managing control of EVA storage using multiple SMAs

Only one SMA can manage a storage system at any given time. If, after performing a rescan SAN operation, the storage system icons are white and the details of the storage system display as unknown, it may be that the current appliance does not have management control of the storage systems.

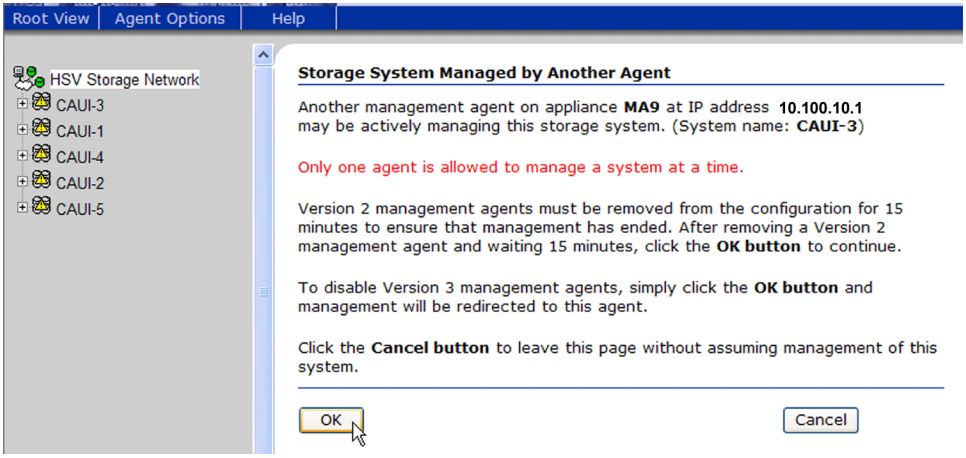
To assume management of a storage system:

1. Launch a Web browser from a client, and then browse to the SMA.

   The Storage Management Appliance Home page opens.

2. Click **Devices**.
3. Click **command view eva**.
4. In the navigation pane, select the desired storage system.

   If the current SMA does not have management control of the storage system, then the Storage System Managed by Another Agent window opens.



5. Click **OK**.

   A dialog box prompts you to confirm that you want the current SMA to assume control of the storage system.

6. Click **OK**.

The current SMA now has management control of the storage system. Repeat this process for all storage systems for which you want the current SMA to assume management control.

Perform a rescan SAN operation. The Continuous Access user interface displays the storage system information about the storage systems for which it has taken control.

Enabling the Continuous Access user interface to receive events

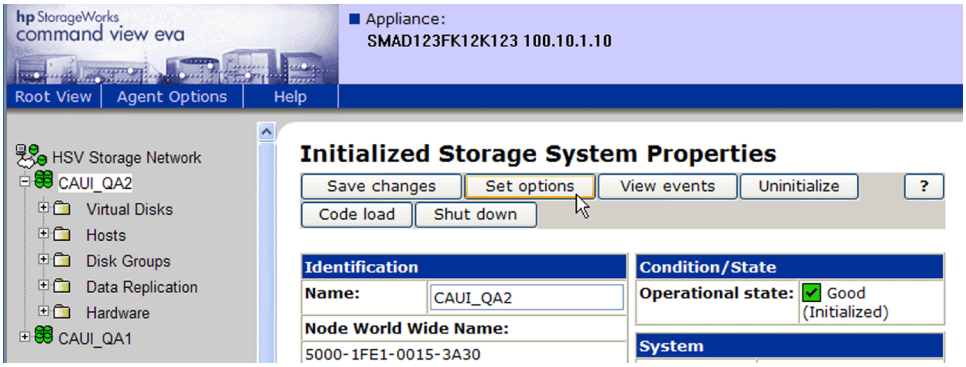
To enable the Continuous Access user interface to display events:

Note: Perform the following procedures on each HSV storage system.

1. Launch a Web browser from a client and browse to the SMA.

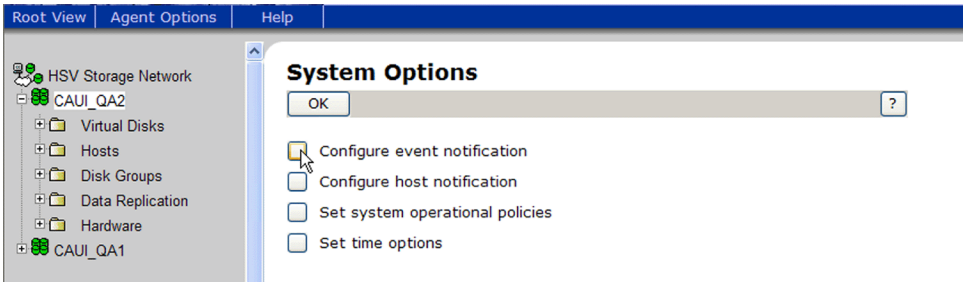
   The Storage Management Appliance Home page opens.
2. Click **Devices**.
3. Click **command view eva**.
4. In the navigation pane, click the desired storage system.

   The Initialized Storage System Properties window opens.



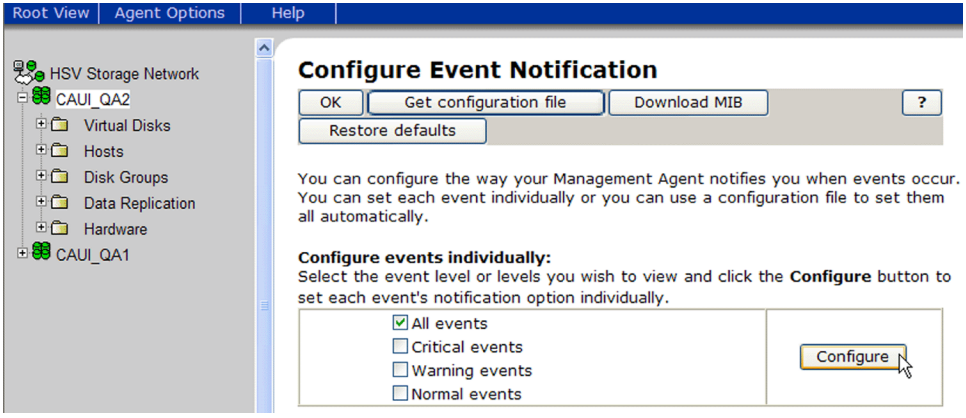
5. Click **Set Options**.

   The System Options window opens.



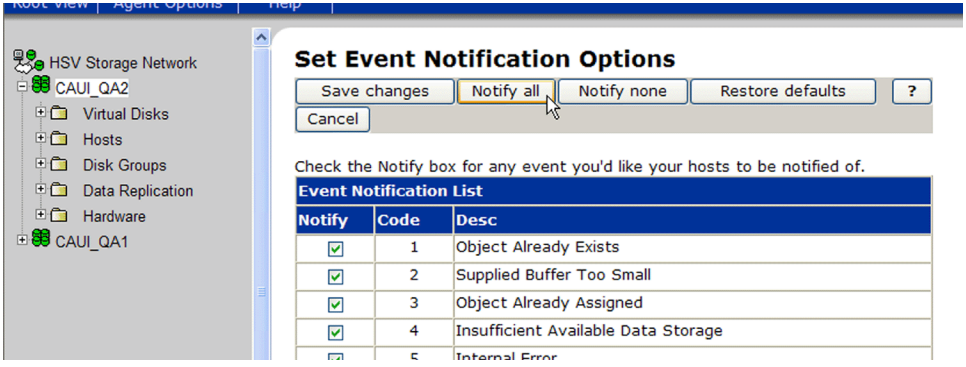
6. Select **Configure event notification**.

   The Configure Event Notification window opens.



7. Ensure that **All Events** is selected under **Configure events individually**, and then click **Configure**.

   The Set Event Notifications Options window opens.



8. Select or clear events.

   The SMA can be configured to be notified of over 1,000 possible events in your SAN. However, the 38 storage cell (SC) event codes that are pertinent to the Continuous Access user interface are listed below.

9	46	0	e	9	c9	51	5	c	4	5f	c
9	47	0	e	9	ca	51	5	c	5	60	c
9	71	0	f	9	cc	51	5	c	6	60	c
9	72	0	f	9	cd	c3	5	c	7	5f	c
9	73	0	f	9	ce	0	5	c	8	61	c
9	74	0	f	9	cf	41	5	c	9	62	c
9	75	0	f	9	d3	51	5	c	a	0	c
9	76	0	f	9	d4	0	5	c	c	0	c
9	77	0	f	9	d5	0	5	c	f	0	c
9	78	0	f	c	0	0	c	c	10	0	c
9	79	0	f	c	1	5f	c	c	11	0	c
9	7a	0	f	c	2	61	c	c	12	0	c
9	c8	51	5	c	3	0	c				

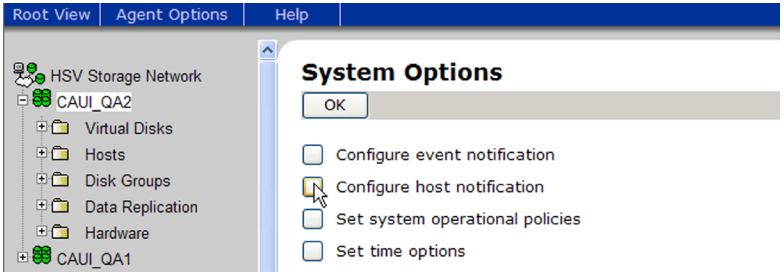
Figure 2: SC event codes pertinent to Continuous Access

Note: Hexadecimal SC event codes are found in the Desc column of the Event Notification List table; do not confuse them with decimal codes in the Code column. Beginning with decimal Code 28000, corresponding SC Event Codes are listed in the Desc column.

9. Click **Save Changes**.
10. In the navigation pane, select the same storage system as the one you selected in step 4.

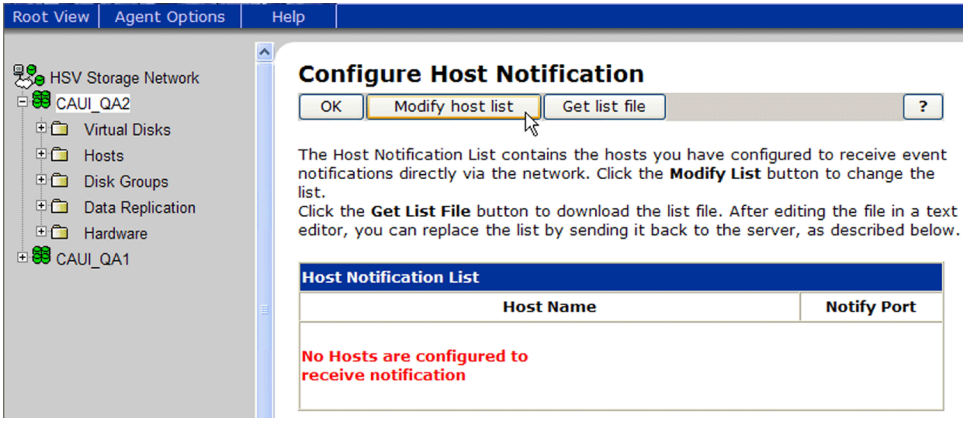
    The Initialized Storage System Properties window opens.
11. Click **Set Options**.

    The System Options window opens.



12. Click **Configure host notification**.

    The Configure Host Notification window opens.

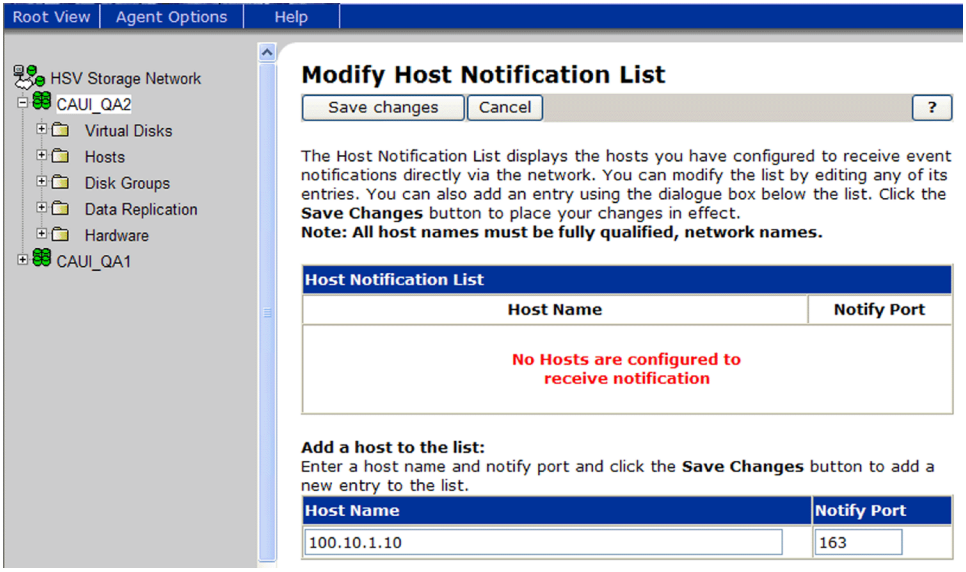


13. Click **Modify host list**.

    The Modify Host Notification List window opens.

14. In the Host Name box, enter the IP address or host name of the SMA where the Continuous Access user interface resides (this may be the same appliance that is running Command View EVA). In the Notify Port box, enter the number `163` (for example, in the Modify Host Notification List window below, a host was entered with a TCP/IP address of `100.10.1.10` with a notify port of `163`).

Note: Enter the IP address of every SMA that you want to receive event notifications. If you configured other SMAs as backups, enter their IP addresses as well so that all will receive notifications when powered up and connected to the network.



15. Click **Save changes**.

Repeat the procedure for each HSV storage system on your Continuous Access EVA fabric.

About the maximum number of events

There is a maximum number of events that the Continuous Access user interface can display. When this maximum is reached, each new event results in the oldest event being discarded. By default this limit is set to 50,000 events. However, this limit is very high, and in most cases you should set the limit to 2000 or fewer.

Setting the maximum number of events

To set the maximum number of events:

1. Log in to the active SMA using the console interface or terminal services.
2. Open the *drm.properties* file with a text editor.

   This file is found on the SMA at `C:\Program Files\Compaq\SANworks\Modules\drm\properties\`
3. In the maximumNumberOfEvents box, change the entry to 2000, or the desired limit.

4. Save the file.
5. Reboot the SMA.

The Continuous Access user interface is now configured to track a maximum of 2000 events.

Changing the log refresh interval

The log is refreshed at a predefined interval. The default interval between polling cycles is two hours (7,200,000 milliseconds). To change the polling interval, modify the **logPanelRefreshInterval** token in the *drm.properties* file.

Note: The interval value is entered in milliseconds.

To change the log refresh interval:

1. Log in to the active SMA using the console interface or terminal services.
2. Open the *drm.properties* file with a text editor.

   This file is found on the SMA at `C:\Program Files\Compaq\SANworks\Modules\drm\properties\`
3. Change the logPanelRefreshInterval to the desired setting. The setting is in milliseconds.
4. Save the file.
5. Reboot the SMA.

The Continuous Access user interface is now configured to poll for logging activity at the set interval.

You can also perform an “on-demand” refresh. To refresh the log:

1. In the session pane, click the **Refresh** button.
2. Choose **Refresh Display**, and then click **OK**.

The Continuous Access user interface updates the logging information displayed on the page, and resets the time of the last update, which is shown at the bottom of the tab.

Note: Performing an on-demand refresh does not affect the normal polling interval.

Enabling backup capabilities for the Continuous Access user interface

Use the Manage tab Maintenance menu to back up and restore the Continuous Access user interface database. This database does not contain or preserve any state information for the EVA, but it does save configuration information about the copy sets, DR groups, managed sets, and storage system folders that you created using the user interface.

Before the Continuous Access user interface can back up its database, you must grant permission to Java™ to write to local or network file systems. You grant these rights by modifying the *java.policy* file on your local computer.

Modifying the java.policy file

To modify the *java.policy* file:

1. Locate the *java.policy* file on your hard drive by using the computer's search function. This is generally in the `\lib\security` subdirectory which is under the subdirectory where you installed the Java Runtime Environment (JRE) or Java Development Kit (JDK).
2. Open the file with a text editor.

   Your *java.policy* file should look similar to the following:

```
// Standard extensions get all permissions by default

grant codeBase "file:${java.home}/lib/ext/*" {
      permission java.security.AllPermission;
};

// default permissions granted to all domains

grant {
      // Allows any thread to stop itself using the java.lang.Thread.stop()
      // method that takes no argument.
      // Note that this permission is granted by default only to remain
      // backwards compatible.
```

Figure 3: Initial lines of a sample java.policy file

3. Insert the following **grant** line at the top of the program, as follows:

```
grant {
      permission java.security.AllPermission;
};

// Standard extensions get all permissions by default

grant codeBase "file:${java.home}/lib/ext/*" {
      permission java.security.AllPermission;
};

// default permissions granted to all domains

grant {
      // Allows any thread to stop itself using the java.lang.Thread.stop()
      // method that takes no argument.
      // Note that this permission is granted by default only to remain
      // backwards compatible.
```

Figure 4: A java.policy file with grant line added

4. Save your modified *java.policy* file.

The Continuous Access user interface can now write backup files to local and network drives.

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